
FROM CODE TO COURTROOM: NAVIGATING COPYRIGHT IN GAMING SOFTWARE

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ABSTRACT

The rapid expansion of the video game industry has introduced complex copyright issues, particularly in relation to gaming software. In India, the absence of a sui generis legal framework for video games has resulted in reliance on the Copyright Act, 1957, for protecting different elements of a game. This paper examines the copyrightability of video games with a focused analysis on gaming software. It analyses the classification of gaming software as a computer programme and its protection as a literary work under Indian law, supported by international instruments such as the Berne Convention, TRIPS Agreement, and the WIPO Copyright Treaty. The paper further discusses the scope of economic and moral rights available to authors of gaming software and examines copyright considerations at various stages of game development. Through statutory analysis and key judicial precedents, the paper highlights emerging challenges involving open-source software, generative AI, and reverse engineering. It concludes by emphasizing the need for stronger legal clarity and policy reforms to effectively protect gaming software in India.

Introduction

The advent and growth of technology has created various industries that would otherwise be unimaginable. One such industry is the gaming sector which has successfully established itself and is constantly growing each day ever since the first commercially profitable game in 1972 called Pong. In 2024-25, the industry was projected to have a revenue of Rs. 25, 300 crore. Furthermore, strong internet penetration coupled with availability of cheap mobile phones led to online gaming becoming popular amongst the young generation.¹

The creation of an entirely new industry, thanks to modern technology, has also invited various intellectual property issues along with it. A video game has a mix of intellectual property rights involved such as trademark over logos and title, patents over hardware for games, copyrights over the software etc.² Any understanding of the underlying IPR in games requires clarity on a fundamental point – games are an amalgamation of cross-cutting and complex technologies but every game can be broken down to two main parts – *firstly*, the audio-visual elements and *secondly*, software elements.³

This paper will examine copyright aspect of games with a special focus on copyright protection of Gaming Software. Additionally, it will also discuss practical aspects relating to copyrights and Gaming Software and how the work must be protected in different stages of developing a game.

Copyrightability of Video Games – A Primer

Currently, India does not have a *sui generis* framework for online games. As a result, copyright protection appears to be the most viable form of protection and this has been followed widely as an industry practice today. This is derived from Article 2 of “the Berne Convention for the Protection of Literary and Artistic Works” which outlines the type of works which are copyrightable.

¹ ETech, “Gaming industry to grow to Rs. 25, 300 crores by 2024-25: report” ECONOMIC TIMES (July 09, 2024), <https://economictimes.indiatimes.com/tech/technology/gaming-industry-to-grow-to-rs-25300-crore-by-end-of-2024-25-report/articleshow/111601396.cms?from=mdr> (last visited on September 28, 2025).

² Jussi Kasurinen, “Games as Software: Similarities and Differences between the Implementation Projects” ACM DIGITAL LIBRARY (2016), <https://dl.acm.org/doi/10.1145/2983468.2983501> (last visited on September 28, 2025).

³ ScoreDetect Team, “Copyright Protection for Video Game Developers: Legal Basis” SCOREDETECT (August 24, 2024), <https://www.scoredetect.com/blog/posts/copyright-protection-for-video-game-developers-legal-basics> (last visited on September 28, 2025).

India's Copyright Act of 1957 does not have separate provisions for protecting games. However, different aspects of video games are protected under different types of work such as literary, dramatic, musical, artistic, cinematograph film etc. as detailed in Section 14. Further clarity on this subject is provided by the "Ministry of Electronics and Information Technology" which states that video games are copyrightable as they are multimedia products. The ministry defines multi-media as

"a computer based interactive communications process that includes a combination of writing, sound, image, still images, animation, video, computer software or interactivity content forms"

With respect to the video aspects of the game, the ministry has outrightly mentioned that it will be protected under cinematograph films but has not specified under which head the other aspects must be protected. However, there is some consensus on this despite ambiguity from the Ministry's end.⁴

Let us take the example of Mario Bros, a popular video game to demonstrate this. The characters such as Mario, Princess Peach and Luigi are artistic works under Section 14(c) of the Copyright Act, 1957. The gameplay featuring the plot, story and objectives are literary works under Section 14(a). The Mario theme song is protected as a sound recording and artistic work under Section 14. The most crucial element which acts as the foundation to any game is the game code which is a combination of software codes and game engines.. The game code is regarded as a Computer Program and it is statutorily protected under Section 14(b).⁵

Another nuance worth mentioning is from an intellectual property law standpoint – a video game is an admixture of novel IP created by developers along with third-party IP. The best IP strategy is to strengthen protection for the new IP and minimise infringement risks of third-party IP and fully exploit the exceptions provided under the Copyright. Legally speaking, two approaches are adopted to regulate video games

⁴ Huma Mehfooz and Guarav Bhalla, "Copyrightability of Video Games" 3(4) INTERNATIONAL JOURNAL OF RECENT RESEARCH ASPECTS 67-77, <https://www.ijrra.net/Vol3issue4/IJRRRA-03-04-15.pdf> (last visited on September 28, 2025).

⁵ Neelesh Nema, "Protection of Multimedia Work in Cyberspace" SSRN (December 28, 2013) <https://ssrn.com/abstract=2372616> (last visited on September 28, 2025).

1. Unitary approach – the video game is mainly regarded to be an audio-visual work or computer program
2. Distributive Approach – each subject matter of the video game is granted protection independently as if it is a separate work⁶

Breaking Down the Code – Copyright Protection for Gaming Software

The success of a multimedia product is directly dependent on the computer program. Software is usually created atop a game engine. This is usually inclusive of a personal suite of various tools or is even amalgamated with autonomous middleware that helps in developing various aspects of the game such as physics simulation, rendering etc.⁷

Without the computer program, the multimedia cannot perform a single task. The interactive effects of the multimedia product is produced by the computer program. This strong dependency relationship has provoked the debate on whether video games should be copyrightable under the head of computer programs.⁸

Various international conventions such as the TRIPS Agreement and the WIPO Copyright Treaty address Computer Programs. These treaties usually make a reference to the Berne Convention.⁹

For instance, Article 10(1) of the TRIPS Agreement states –

"Computer Programmes, whether in source or object code, shall be protected as literary works under the Berne Convention (1971)"

Article 4 of the WIPO Copyright Treaty states –

⁶ Irini A. Stamatoudi, "Are Sophisticated Multimedia Works Comparable to Video Games?," 48 J. Copyright Soc'y U.S.A. 467 (2000-2001) (last visited on September 28, 2025).

⁷ Scelsi, Christina, and Ross Alan Dannenberg, editors, "Computer Games and Immersive Entertainment: Next Frontiers in Intellectual Property Law" 2nd ed. ABA BOOK PUBLISHING, 2019.

⁸ Despoina Farmaki, "The player, the programmer and the AI: a copyright odyssey in gaming," 18(2) JOURNAL OF INTELLECTUAL PROPERTY LAW & PRACTICE, (2023), Pages 920–928, <https://doi.org/10.1093/jiplp/jpad095> (last visited on September 28, 2025).

⁹ Vrinda Sehgal, "Status of copyright protection for video games in India" LEXOLOGY (December 31, 2021), <https://www.lexology.com/library/detail.aspx?g=19946c7c-c158-4a9b-9486-abfe84c94f69> (last visited on September 28, 2025).

"Computer Programmes are protected as literary works within the meaning of Article 2 of the Berne Convention"

It can be inferred that copyright protection is available to computer programs irrespective of the form or mode of expression.

However, the term 'Computer Program' in itself is not defined in these conventions. The "WIPO Model Provisions on the Protection of Computer Software, 1978" serves as a useful reference in defining computer program –

"A set of instructions capable, when incorporated in a machine readable medium of causing a machine having information processing capabilities to indicate, perform or achieve a particular function, task or result."

In India, Section 2(ffc) of the Copyright Act defines 'Computer Program' and the definition is inspired by the WIPO provision above-mentioned.

"computer programme" means a set of instructions expressed in words, codes, schemes or in any other form, including a machine readable medium, capable of causing a computer to perform a particular task or achieve a particular result"

Section 2(o) of the Copyright Act, 1957 includes computer program under the head of literary works in line with the TRIPS Agreement. An amendment was brought in 1994 to provide for rights relating to software programs. Author in relation to any work which is computer generated is "the person who causes the work to be created" as per Section 2(d) of the Act.

A cumulative reading of all these provisions lead us to the inference that gaming software is a literary work and the author has economic and moral rights associated with it. Under Section 14, the author has various rights such as the Right of reproduction, right to distribute copies, right to communicate to the public, right to make translation and adaptation etc. Section 14 (b) provides for an additional right specifically for computer programmes i.e., right to offer for sale, commercial rental, right to sale of the computer programme. However, there is a rider for commercial rental that the right does not apply for those computer programmes where it is not

the rental's essential object.¹⁰

Moral rights of paternity and integrity are also available to gaming software. This is outlined in Section 57. Right of paternity is also known as right of attribution and gives the author the right to claim ownership of the gaming software. The author also has the right to prevent distortion, modification, mutilation of the work or any other action which will jeopardize his honour or reputation.¹¹

The Evolution of a Video Game – Copyright Considerations in Gaming Software during different phases of Game Development

The development of a video game is a journey. It is not a process which concludes in a single day. This means, the gaming software goes through different stages of evolution before it takes its final shape. Therefore, at different points in time, the owner has to carefully evaluate the copyright considerations in the gaming software. These aspects are discussed in this subsection at length.

Concept Phase

This is the nascent stage in video game development wherein innovative and novel ideas are generated and the initial designs are implemented. When ideas are freely being discussed without it taking a shape yet, confidentiality is vital. It is important to protect critical information relating to game design, algorithms, software codes, computer programs etc.¹²

The business entities must enter into Non-Disclosure Agreements with developers to secure confidential information and prevent misuse or unauthorised access. Since ideas are not granted protection and only expression of ideas can be granted protection, it is important to safeguard the ideas so that other entities do not copy / steal the same.

Some action items during the concept phase are as follows -

¹⁰ WIPO, "Understanding Copyright and Related Rights" (2016), https://www.wipo.int/edocs/pubdocs/en/wipo_pub_909_2016.pdf (last visited on September 28, 2025).

¹¹ Hansmann, H., & Santilli, M. (1997). "Authors' and Artists' Moral Rights: A Comparative Legal and Economic Analysis". *THE JOURNAL OF LEGAL STUDIES*, 26(1), 95–143. <https://doi.org/10.1086/467990> (last visited on September 28, 2025).

¹² Boyd, S. Gregory, et al. "Video Game Law: Everything You Need to Know About Legal and Business Issues in the Game Industry." CRC Press, 2019.

1. After the idea stage materialises, business entities must take steps into putting the work into paper and register it. Although copyright protection is automatic, it is beneficial to register it for better enforceability.
2. The computer program must be original and there must also be sufficient evidence to prove the same.
3. The Entity must enter into contracts with developers, third parties and independent contractors to ensure that ownership of copyright is clearly delineated as per Section 17 of the Act¹³

Software Development Phase

It is only during this stage that ideas materialise, assets are created and code is written. It is important for developers to ensure that the content created at this stage are original and there is no infringement of any third party IPR. Business entities must enter into licensing agreements to ensure that third-party assets to be incorporated into the game are free of infringement.¹⁴

Some action items during this stage are –

1. Business entities should negotiate and enter into license agreements and also ensure compliance with its terms while using the licensed assets
2. Entities should evaluate the consequences of using Open Source Software for the game and adhere to licensing obligations, if any
3. If AI is used while making the software, the implications of such AI in relation to copyright must be carefully examined.¹⁵

¹³ Dr. Gaetano Dimita, “*Understanding Intellectual Property in Video Games*,” WIPO COMMITTEE ON DEVELOPMENT AND INTELLECTUAL PROPERTY (November 2023), <https://www.wipo.int/export/sites/www/cooperation/en/docs/ip-video-games.pdf> (last visited on September 28, 2025).

¹⁴ “Ownership and Copyright of Software in India” INDIA LAW OFFICES LLP (March 15, 2023), <https://www.indialawoffices.com/legal-articles/ownership-and-copyright-software-in-india> (Last visited on September 28, 2025).

¹⁵ Thomas M. S. Hemnes, “The Adaptation of Copyright Law to Video Games,” 131 U. Pa. L. Rev. 171 (1982-1983), https://scholarship.law.upenn.edu/penn_law_review/vol131/iss1/5/ (Last visited on September 28, 2025).

A Note on Open-Source Software

Open source is a form of software which is under a license allowing study, use, redistribution and modification of the source code.¹⁶ It is a common misconception that freeware is open source. However, this may not necessarily be the case always. Commonly used open source licenses are LGPL, BSD, GNU, MIT, Apache etc. and they can be divided into the following categories based on their features¹⁷

PERMISSIVE (BSD, MIT, APACHE)	WEAK COPYLEFT (LGPL)	COPYLEFT (GPL)
Many freedoms/rights granted	Many freedoms/rights granted	Many freedoms/rights granted
No copyleft effect	Obligation to credit	Obligation to credit
Obligation to credit	Obligation to identify your modifications	Obligation to identify your modifications
	Copyleft effect in some specific cases	Copyleft effect

A Note on Generative AI

If generative AI is used for creating the gaming software, entities must evaluate the possibility that the work may not be protectable by copyright. The eligibility of copyright protection for works which are created substantially by AI with negligible creative input from the developers is still debatable and standards in different countries vary and are fast-changing. This discussion may not be of relevance for software code which is secondary or in the background of the video game. However, due precaution must be taken for the gaming software which is central and essential to the video game.

Additionally, if AI is used to check or write codes on platforms such as ChatGPT, GitHub Copilot, it is equivalent to uploading the code to their system which can be used for training the AI platform. At this juncture, entities must decide if confidentiality of the gaming software

¹⁶ Greenspan, David, and Gaetano Dimita. *Mastering the Game: Business and Legal Issues for Video Game Developers*. World Intellectual Property Organization, 2022.

¹⁷ "The Legal Side of Open Source" OPEN SOURCE GUIDES, <https://opensource.guide/legal/> (Last visited on September 28, 2025).

can be foregone for using such AI.¹⁸

Launch Phase

So far, Copyright considerations of the gaming software remained internal to the Company and any errors have little legal consequence. However, during the launch phase, the assets are finalized and all decisions have external consequences as well. Therefore, it is important for businesses to conduct a risk assessment of the Gaming Software from a copyright standpoint.¹⁹ The risk assessment should entail the following aspects –

Conduct a risk assessment

For each asset in your game, identify any third party IP and how you have the right to use it. The table below can guide you.

Safe	Potential risk	DON'T!
<ul style="list-style-type: none"> Original creations (*check if others have made something similar). Works in the public domain. Someone else's IP when licensed and used consistently with the agreement. 	<ul style="list-style-type: none"> Creation heavily inspired / partially copied from existing IP without permission. AI & Open Source. Real people or brands, architectural and historical buildings. 	<ul style="list-style-type: none"> Use someone else's IP without permission. Assume that a legal exception applies everywhere.

Key tips at concept phase



Case Laws

Sega Enterprises v. Richards²⁰

The plaintiff was the creator of the video game called Frogger. The creator alleged that copyright infringement of computer software regulating the gameplay occurred due to the

¹⁸ Härting Rechtsanwälte, “AI Content in Gaming: What about Copyright? LEXOLOGY (August 8, 2023), <https://www.lexology.com/library/detail.aspx?g=d028e259-a28c-48a6-bf47-1fc81e5c4a03> (last visited on September 28, 2025).

¹⁹ Amey Jadhav, “Copyright Law and Video Games” MANUPATRA (July 8, 2021), <https://articles.manupatra.com/article-details/Copyright-Law-and-Video-Games> (last visited on September 28, 2025).

²⁰ [1983] F.S.R. 73.

defendant. The defendant admitted that his gaming software was based upon and inspired by Frogger's machine code program.

The court held that copyright subsists in assembly code program and are protected as literary works. The Machine code program which is derived from the assembler is to be regarded as an adaptation or reproduction of the assembly code and therefore, infringement has occurred in the instant case.

Apple Computer Inc. v. Computer Edge Pvt. Ltd.²¹

The court held that computer program in source code form is an original literary work. Source code refers to a program drafted in any programming language. Object code is a computer program version wherein the source code is transformed into machine language such that the computer will understand the instructions. The court also held that object code is "an adaptation or mechanical translation of the source code" for copyright purposes and substantial similarity in the object code infringes the copyright in the source code.

Atari Games Corp. v. Nintendo of America, Inc.²² & Sega Enterprises Ltd. v. Accolade, Inc.²³

These cases are analysed together for their contradicting ratio on the same issue relating to reverse engineering of gaming code. The parties reverse engineered the gaming code of Sega's and Nintendo's video game consoles in order to improve its compatibility with their own games.

In the Sega Case, Accolade submitted that reverse engineering was needed to create their own games and there was no infringement. The court accepted the argument and classified reverse engineering as fair use.

But in the Nintendo case, the same arguments were not upheld because Atari unlawfully procured the software code from Copyright Office. Therefore, in this case, the court held that Atari infringed the copyright.

²¹ [1983] 50 Austl. L.R. 581

²² 975 F.2d 832 (Fed. Cir. 1992)

²³ 977 F.2d 1510 (9th Cir. 1992)

Sony v. Harmeet Singh and Others²⁴

Sony produced PlayStation 3 consoles and games. The Defendant modified these consoles to run pirated games by using a "jailbreak" software such that it bypassed Sony's encryption. He copied original games, distributed them illegally and commercially exploited the work. Sony sued for injunction and copyright infringement as the Defendant had modified the consoles without consent and reproduced games in violation of licenses. The court granted an ex-parte injunction. The defendant was stopped from copying, distributing, or modifying Sony's consoles and games.

Conclusion and Suggestions

Copyright protection for gaming software is integral to the video game industry. It ensures that the intellectual efforts behind game code and software development are legally safeguarded. As gaming software forms the backbone of interactive entertainment, its classification as a literary work under copyright law emphasizes the importance of securing the rights of developers against unauthorized reproduction or modification. Upholding copyright in gaming software fosters innovation while protecting developers from potential infringement. This ensures fair competition and encourages creativity in the ever-evolving gaming sector.

Moreover, the constant evolution of gaming technology emphasizes the importance of clearly defining and protecting the rights associated with gaming software at every stage of development. Whether through the development phase or in commercial exploitation, securing these rights under copyright law ensures that original creators retain control over their work. As gaming continues to grow into one of the most lucrative industries globally, the intersection of gaming software and copyright law will remain crucial for both legal and creative communities to foster innovation and fairness.

Some suggestions to improve the existing legal regime for gaming software are –

1. **Sui Generis Legal Framework:** India should establish a specialized legal regime that specifically addresses the protection of video game software. This would eliminate ambiguities in the existing Copyright Act and cater to the unique nature of gaming

²⁴ 2012 SCC OnLine Del 6505.”

software and its multi-faceted intellectual property aspects.

2. **Strengthened Enforcement of Digital Rights Management (DRM):** Implementing stricter regulations around DRM to protect game codes from piracy, modification, and unauthorized distribution can enhance protection.
3. **Recognizing User-Generated Content and Online Platforms:** Amend copyright laws to address emerging issues, such as user-generated content in multiplayer games and online streaming, ensuring a balance between user rights and game developers' interests.